Hand Gesture Recognition Interface Based on IR Camera

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Abstract : Vision based user interfaces to control TVs and PCs have the advantage of being able to perform natural control without being limited to a specific device. Accordingly, various studies on hand gesture recognition using RGB cameras or depth cameras have been conducted. However, such cameras have the disadvantage of lacking in accuracy or the construction cost being large. The proposed method uses a low cost IR camera to accurately differentiate between the hand and the background. Also, complicated learning and template matching methodologies are not used, and the correlation between the fingertips extracted through curvatures is utilized to recognize Click and Move gestures.